

THE SAINT LOUIS MAGNET.

VOL. 1.

SAINT LOUIS, FEB. 1, 1846.

No. 10.

ELECTRICITY.

Continued from page 194.

Ex. 10.—Rub or grate together two round uncut stones, of quartz, calcedony, cornelian, &c., and a strong phosphoric light and odor will be produced, showing another peculiarity, viz.: that the electric fluid is perceptible to our sense of smelling.

Ex. 11.—Break a large lump of loaf sugar in the dark, or pound it in a mortar, when it will appear covered with a beautiful lambent blue flame. When grocers are sawing up loaves of sugar as samples, the dust is most luminous and beautiful.

Ex. 12.—In grinding coffee, particularly if it be fresh burnt, it will be seen to cling around the lower part of the mill, and also around the cup or basin held to catch it—sometimes so strongly as to cover the sides two inches or more above the general surface.

Ex. 13.—Put upon the same leg a worsted stocking, and over this a silk one. Warm the leg at the fire, and rub the hand over the stockings. This done, slip off the silk stocking suddenly, and the two sides of it will recede from each other, and the whole retain the same shape as if the leg still remained in it.

Ex. 14.—Take a glass tube, about two feet long, and an inch in diameter; warm it and rub it with a warm flannel. It will show strong signs of attraction to any light body brought near it.

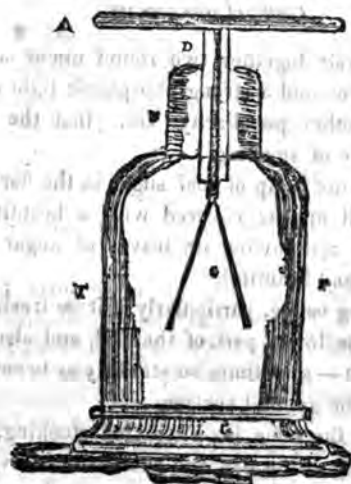
Ex. 15.—If, while still excited, a light fleecy feather be brought near, it will at first cling to the glass rod; and afterwards fly away from it, and may be driven about a room, by holding the glass between it and any surrounding object. If it should touch anything not electrified, it will fly back to the glass again.

Ex. 16.—Suspend from the ceiling a metallic ball, by a silk cord, and touch it with the excited glass rod. This ball will now attract light bodies in nearly the same manner as the glass rod itself does. This is

called *communicated* electricity, while the glass rod acts by *excited* electricity.

These experiments are but a very few which might be devised to show the universality of the electric fluid. They are but transient, because we have employed no instrument to prevent the escape of the fluid put into action, (except, indeed, in the last experiment.) One of the simplest and most useful of them is Bennet's Gold-leaf Electrometer, which will not only have the desired effect, at least for a considerable time, but enable us to show that the most trivial actions we do, in a proportionate degree, display electrical appearances.

THE GOLD-LEAF ELECTROMETER.



A B is a brass plate, (called the cap,) about four inches in diameter, having a wire fastened to the middle of it. This wire passes down the glass tube D, into the glass vessel F F. When the wire has reached about one inch into this vessel, it is slit at the end, and a little bit of card fastened into the slit. A strip of gold leaf, half an inch wide and three inches long, is now pasted upon each side of the card, so as to touch the wire above, and hang free from the glass around. E is a wooden top for the convenience of fastening the part together, and G is a the foot-board or stand of the instrument. At F F, on two opposite sides of the glass, are pasted two slips of tin foil, to carry off the superabundant fluid to the foot of the instrument.

Obs.—A cheap and good substitute for the above may be made of a common six-ounce phial. A wire passing through the cork of it, having the gold leaves within the phial, and a brass ball or a bullet above. A lamp glass, also, with a cork above and below, (ball and gold leaves similarly arranged,) answers every purpose; the bit of card, also, is of

little consequence; and let it be remarked, once for all, that whenever *glass* apparatus is employed, it must be kept perfectly dry, slightly warm, and free from dust. Of so much consequence is this, that should there have been a failure in any of the simple experiments, it most probably has arisen from neglect of this precaution.

Ex. 17.—Hold near the above instrument any of the excited bodies used before; such as the paper, or the glass rod, and the gold leaves will diverge to a considerable distance from each other, and remain so for some time. A well-excited glass tube will stimulate it at the distance of two or three feet, and must not be brought too rapidly close to it, or the gold leaves will be rent to atoms by the violence of the action.

Ex. 18.—Brush the cap of the electrometer with the feathery part of a quill, and the gold leaves will instantly diverge.

Ex. 19.—Give the cap a blow or two with the corner of a black silk handkerchief, previously warmed, and the friction, small as it is, will be found to have the same effect as before.

Ex. 20.—Place upon the cap a small tin dish or patty pan, having in it a red hot coal, just taken out of the fire. Sprinkle upon the coal a few drops of water; the evaporation of this will set the gold leaves into considerable action.

Ex. 21.—Sift some steel, brass, or other metallic filings, upon the cap of the electrometer, from out of a metallic sieve. These filings become electrical by the friction merely of passing through the holes of the sieve, and will consequently affect the gold leaves.

Ex. 22.—Take a knife, with a glass or ivory handle, and cut some small pieces off a slip of deal, so that they shall fall upon the cap as before. Each piece carrying down with it a portion of the fluid disturbed, will, in a similar manner, affect the instrument.

Thus, it will be seen, that a person brushing a coat, cleaning windows, beating a carpet, placing a kettle on the fire to boil, sifting cinders, or planing a board—a school boy rubbing out the lines of his cyphering book, or his master making a pen, is, during the time he is so employed, as effectually an electrical machine as the most elaborate apparatus made by all the art of the optician. Many manufacturers, indeed, find the fluid somewhat inconvenient. In the weaving of different textures, such as bombazine, where worsted and silk are intermixed, the work is very electrical. In the making of chocolate, great care must be taken, that, in cooling in the pans, no dust shall come near it, or it would attract it so much as to become unsaleable, as is the case with sealing wax in large quantities. The grinding of coffee has been already mentioned, and in grinding wheat or malt it is no less conspicuous, though few suppose

that electricity assists in making the miller *while*. The workers in amber are so annoyed by its strong, attractive, and easily excitable tendency, as to have the nerves of their hands and wrists disagreeably acted upon.

[To be continued.]

BULWER ON WATER CURE.

[The following interesting article, from the pen of the celebrated Bulwer, is taken from Shew's "Water Cure Journal," just commenced in New York.]

Here we are, Mr. Editor, in these days of cant and jargon, preaching up the education of the mind, forcing our children under melon-frames, and babbling to the laborer and mechanic, "Read, read, read," as if God had not given us muscles, and nerves, and bodies, subjected to exquisite pains and pleasures—as if the body were not to be cared for and cultivated as well as the mind; as if health were no blessing, instead of that capital good without which all other blessings, save the hope of health eternal, grow flat and joyless; as if the enjoyment of the world in which we are was not far more closely linked with our physical than our mental selves; as if we were better than maimed and imperfect men, so long as our nerves are jaded and prostrated, our senses dim and heavy, our relationship with nature abridged and thwarted by the jaundiced eye, and falling limb, and trembling hand—the apothecary's shop between us and the sun! For the mind, we admit, that to render it strong and clear, habit and discipline are required. How deal we—(especially we, Mr. Editor, of the London world—we of the literary craft—we of the restless, striving brotherhood)—how deal we with the body? We carry it on with us, as a post-horse, from stage to stage. Does it flag?—no rest! give it ale or the spur. We begin to feel the frame break under us; we administer a drug, gain a temporary relief, shift the disorder from one part to another, forget our ailments in our excitements, and when we pause at last, thoroughly shattered, with complaints grown chronic, diseases fastening to the organs, send for the doctors in good earnest, and die, as your predecessors and your rival died, under combinations of long neglected maladies, which could never have been known had we done for the body what we do for the mind—made it strong by discipline, and maintained it firm by habit.

Not alone calling to recollection our departed friends, but looking over the vast field of suffering which those acquainted with the lives of men who think and labor cannot fail to behold around them, I confess, though I have something of Canning's disdain of professed philanthropists, and do not love every knife-grinder as if he were my brother—I confess, nevertheless, that I am filled with an earnest pity, and an anxious desire seizes me to communicate to others that simple process of healing and well-being which has passed under my own experience, and to which I gratefully owe days no longer weary of the sun, and nights which no longer yearn for, and yet dread, the morrow.

And now, Mr. Editor, I may be pardoned, I trust, if I illustrate, by my own case, the system I commend to others.

I have been a workman in my day. I began to write and to toil, and to win some kind of a name, which I had the ambition to improve, while yet little more than a boy. With strong love for study in books—with yet greater desire to accomplish myself in the knowledge of men, for sixteen years I can conceive no life to be more filled by occupation than mine. What time was not given to action was given to study; what time not given to study, to action—labor in both. To a constitution naturally far from strong, I allowed no pause or respite. The wear and tear went on without intermission; the whirl of the wheel never ceased. Sometimes, indeed, thoroughly overpowered and exhausted, I sought for escape. The physicians said, "Travel," and I travelled. "Go into the country," and I went. But in such attempts at repose all my ailments gathered round me—made themselves far more palpable and felt. I had no resource but to fly from myself; to fly into the other world of books, or thought, or revery—to live in some state of being less painful than my own. As long as I was always at work, it seemed that I had no leisure to be ill. Quiet was my hell.

At length the frame thus long neglected, patched up for a while by drugs and doctors, put off and trifled with as an intrusive dun, like a dun who is in his rights, brought in its arrears—crushing and terrible, accumulated through long years. Worn out and wasted, the constitution seemed wholly inadequate to meet the demand. The exhaustion of toil and study had been completed by great anxiety and grief. I had watched, with alternate hope and fear, the lingering and mournful death-bed of my nearest relation and dearest friend—of the person around whom was entwined the strongest affection my life had known, and when all was over, I seemed scarcely to live myself.

At this time, about the January of 1844, I was thoroughly shattered. The least attempt at exercise exhausted me. The nerves gave way at

the most ordinary excitement. A chronic irritation of that vast surface we call the mucous membrane, which had defied for years all medical skill, rendered me continually liable to acute attacks, which, from their repetition and increased feebleness of my frame, might at any time be fatal. Though free from any organic disease of the heart, its action was morbidly restless and painful. My sleep was without refreshment. At morning I rose more weary than I laid down to rest.

Without fatiguing you and your readers further with the *longa cohors* of my complaints, I pass on to record my struggle to resist them. I have always had great faith in the power of the WILL. What a man determines to do, that, in ninety-nine cases out of the hundred, I hold that he succeeds in doing. I determined to have some insight into a knowledge I had never attained since manhood—the knowledge of health.

I resolutely put away all books and study, sought the airs which the physicians esteemed the most healthful, and adopted the strict regimen on which all the children of Æsculapius so wisely insist. In short, I maintained the same general habits as to hours, diet, (with the exception of wine, which, in moderate quantities, seemed to me indispensable,) and, so far as my strength would allow, of exercise, as I found afterwards instituted at hydropathic establishments. I dwell on this to forestal, in some manner, the common remark of persons not well acquainted with the medical agencies of water—that it is to the regular life which water-patients lead, and not to the element itself, that they owe their recovery. Nevertheless, I found that these changes, however salutary in theory, produced little, if any, practical amelioration in my health. All invalids know, perhaps, how difficult, under ordinary circumstances, is the alteration of habits from bad to good. The early rising, the walk before breakfast, so delicious in the feelings of freshness and vigor which they bestow upon the strong, often become punishments to the valetudinarian. Headache, languor, a sense of weariness over the eyes, a sinking of the whole system towards noon, which seemed imperiously to demand the dangerous aid of stimulants, was all that I obtained by the morning breeze and the languid stroll by the sea-shore. The suspension from study only afflicted with intolerable *ennui*, and added to the profound dejection of the spirits. The brain, so long accustomed to morbid activity, was but withdrawn from its usual occupations to invent horrors and chimeras. Over the pillow, vainly sought two hours before midnight, hovered no golden sleep. The absence of excitement, however unhealthy, only aggravated the symptoms of ill health.

It was at this time that I met, by chance, in the library at St. Leonard's, with Captain Claridge's work on the "Water Cure," as practised by

Priessnitz at Gräfenberg. Making allowance for certain exaggerations therein, which appeared evident to my common sense, enough still remained, not only to captivate the imagination and flatter the hopes of an invalid, but to appeal with favor to his sober judgment. Till then, perfectly ignorant of the subject and the system, except by some such vague stories and good jests as had reached my ears in Germany, I resolved at least to read what more could be said in favor of the *ariston odor*, and examine dispassionately into its merits as a medicament. I was then under the advice of one of the first physicians of our age. I had consulted half the faculty. I had every reason to be grateful for the attention, and to be confident in the skill, of those whose prescriptions had, from time to time, flattered my hopes and enriched the chemist. But the truth must be spoken—far from being better, I was sinking fast. Little remained to me to try in the great volume of the herbal. Seek what I would next, even if a quackery, it certainly might expedite my grave, but it could scarcely render life, at least the external life, more unjoyous. Accordingly, I examined, with such grave thought as a sick man brings to bear upon his own case, all the grounds upon which to justify to myself an excursion to the snows of Silesia. But I own, that in proportion as I found my faith in the system strengthen, I shrunk from the terrors of this long journey to the rugged region in which the probable lodging would be a laborer's cottage, and in which the Babel of a hundred languages, (so agreeable to the healthful delight in novelty—so appalling to the sickly dependency of a hypochondriac) would murmur and growl over a public table spread with no tempting condiments. Could I hope to find healing in my own land, and not too far from my own doctors: in case of failure, I might indeed solicit the watery gods—but the journey! I, who scarcely lived through a day without leech or potion—the long, gelid journey to Gräfenberg—I should be sure to fall ill by the way, to be clutched and mismanaged by some German doctor, to deposit my bones in some dismal churchyard on the banks of the Father Rhine.

While thus perplexed, I fell in with one of the pamphlets written by Dr. Wilson, of Malvern and my doubts were solved. Here was an English doctor, who had himself known more than my own sufferings, who, like myself, had found the pharmacopœia in vain—who had spent ten months at Gräfenberg, and left all his complaints behind him—who, fraught with the experience he had acquired, not only in his own person, but from scientific examination of cases under his eye, had transported the system to our native shores, and who proffered the proverbial salubrity of Malvern air and its holy springs to those who, like me, had ranged in vain from simple to mineral, and who had become bold by despair—bold enough to try if health, like truth, lay at the bottom of a well.

I was not then aware that other institutions had been established in England of more or less fame. I saw in Dr. Wilson the first transporter, at least as a physician, of the Silecian system, and did not pause to look out for other and later pupils of this innovating-German school.

I resolved, then, to betake myself to Malvern. On my way through town I paused, in the innocence of my heart, to inquire of the faculty if they thought the water cure would suit my case. With one exception, they were unanimous in the vehemence of their denunciations. Granting even that in some cases, especially of rheumatism, hydropathy had produced a cure, to my complaints it was worse than inapplicable — it was highly dangerous — it would probably be fatal. I had not stamina for the treatment; it would fix chronic ailments into organic disease; surely it would be much better to try what I had not yet tried. What had I not yet tried? A course of prussic acid! Nothing was better for gastric irritation, which was no doubt the main cause of my suffering! If, however, I were obstinately bent upon so mad an experiment, Dr. Wilson was the last person I should go to. I was not deterred by all these intimidations, nor seduced by the salubrious allurements of the prussic acid under its scientific appellation of hydrocyanic. A little reflection taught me that the members of a learned profession are naturally the very persons least disposed to favor innovation upon the practises which custom and prescription have rendered sacred in their eyes. A lawyer is not the person to consult upon bold reforms in jurisprudence. A physician can scarcely be expected to own that a Silesian peasant will cure with water the diseases which resist an armament of phials. And with regard to the peculiar objections to Dr. Wilson, I read in his own pamphlet attacks upon the orthodox practice sufficient to account for, perhaps to justify, the disposition to depreciate him in return.

Still, my friends were anxious and fearful. To please them, I continued to inquire, though not of physicians, but of patients. I sought out some of those who had gone through the process. I sifted some of the cases of cure cited by Dr. Wilson. I found the account of the patients so encouraging, the cases quoted so authentic, that I grew impatient of delay. I threw physic to the dogs, and went to Malvern.

It is not my intention, Mr. Editor, to detail the course I underwent. The different resources of water as a medicament are to be found in many works easily to be obtained, and well worth the study. In this letter I suppose myself to be addressing those as thoroughly acquainted with the system as myself was at first, and I deal, therefore, only in generals.

The first point which impressed and struck me was, the extreme and utter innocence of the water-cure in skilful hands — in any hands, indeed,

not thoroughly new to the system. Certainly, when I went, I believed it to be a kill or cure system. I fancied it must be a very violent remedy—that it doubtless might effect great and magical cures; but that if it failed it might be fatal. Now, I speak not alone of my own case, but of the immense number of cases I have seen: patients of all ages; all species and genera of disease; all kinds and conditions of constitution, when I declare, upon my honor, that I have never witnessed one dangerous symptom produced by the Water Cure, whether at Dr. Wilson's or the other hydropathic institutions which I afterwards visited; and though, unquestionably, fatal consequences might occur from gross mismanagement, and as unquestionably have so occurred at various establishments, I am yet convinced that water, in itself, is so friendly to the human body; that it requires a very extraordinary degree of bungling, of ignorance, and presumption, to produce results really dangerous—that a regular practitioner does more frequent mischief from the misapplication of even the simplest drugs, than a water doctor of very moderate experience does, or can do, by the misapplication of his baths and friction. And here I must observe, that those portions of the treatment which appear to the uninitiated the most perilous, are really the safest—such as the wet-sheet packing, and can be applied with the most impunity to the weakest constitutions; whereas those which appear, from our great familiarity with them, the least startling and the most innocuous—the plunge-bath, the Douche, are those which require the greatest knowledge of general pathology and the individual constitution. I shall revert to this part of my subject before I conclude.

The next thing that struck me was, the extraordinary ease with which, under this system, good habits are acquired and bad habits relinquished. The difficulty with which, under orthodox medical treatment, stimulants are abandoned, is not here witnessed. Patients accustomed, for half a century, to live hard and high, wine-drinkers, spirit-bibbers, whom the regular physician has sought in vain to reduce to a daily pint of sherry, here voluntarily resign all strong potations—after a day or two cease to feel the want of them; and reconcile themselves to water as if they had drunk nothing else all their lives. Others who have had recourse for years and years to medicine—their potion in the morning, their cordial at noon, their pill before dinner, their narcotic at bed-time—cease to require these aids to life, as if by a charm. Nor this alone. Men to whom mental labor has been a necessary—who have existed on the excitement of the passions and the stir of the intellect, who have felt, these withdrawn, the prostration of the whole system—the dock to the wheel of the entire machine—return at once to the careless spirits of the boy in his first holiday.

Here lies a great secret; water thus skilfully administered is in itself a wonderful excitement; it supplies the place of all others: it operates powerfully and rapidly upon the nerves, sometimes to calm them, sometimes to irritate, but always to occupy. Hence follows a consequence which all patients have remarked—the complete repose of the passions during the early stages of the cure; they seem laid asleep as if by enchantment. The intellect shares the same rest. After a short time, mental exertion becomes impossible; even the memory grows far less tenacious of its painful impressions; cares and griefs are forgotten; the sense of the present absorbs the past and future; there is a certain freshness and youth which pervade the spirits, and live upon the enjoyment of the actual hour. Thus, the great agents of our mortal wear and tear—the passions and the mind—calmed into strange rest. Nature seems to leave the body to its instinctive tendency, which is always towards recovery. All that interests and amuses is of a healthy character. Exercise, instead of being an unwilling drudgery, becomes the inevitable impulse of the frame braced and invigorated by the element. A series of reactions is always going on—the willing exercise produces refreshing rest, and refreshing rest, willing exercise. The extraordinary effect which water taken early in the morning produces on the appetite; is well known amongst those who have tried it, even before the Water-Cure was thought of; an appetite it should be the care of the skilful doctor to check into moderate gratification; the powers of nutrition become singularly strengthened; the blood grows rich and pure; the constitution is not only amended—it undergoes a change.

The safety of the system, then, struck me first; its power of replacing, by healthful stimulants, the morbid ones it withdrew, whether physical or moral, surprised me next; that which thirdly impressed me was no less contrary to all my preconceived notions. I had fancied that, whether good or bad, the system must be one of great hardship, extremely repugnant and disagreeable. I wondered at myself to find how soon it became so associated with pleasurable and grateful feelings as to dwell upon the mind amongst the happiest passages of existence. For my own part, despite all my ailments, or whatever may have been my cares, I have ever found exquisite pleasure in that sense of being which is, as it were, the conscience, the mirror of the soul. I have known hours of as much and as vivid happiness as perhaps can fall to the lot of man; but amongst all my most brilliant recollections, I can recall no periods of enjoyment at once more bilious and serene than the hours spent on the lonely hills of Malvern—none in which nature was so thoroughly possessed and appreciated. The rise from a sleep as sound as childhood's; the impatient

rush into the open air, while the sun was fresh, and the birds first sang; the sense of an unwonted strength in every limb and nerve, which made so light of the steep ascent to the holy spring; the delicious sparkle of that morning draft; the green terrace on the brow of the mountain, with the rich landscape wide and far below; the breeze that once would have been so keen and biting, now but exhilarating the blood, and lifting the spirits into religious joy; and this keen sentiment of present pleasure rounded by a hope sanctioned by all I felt in myself, and nearly all that I witnessed in others—that that very present was but the step, the threshold, into an unknown and delightful region of health and vigor—a disease and a care dropping from the frame and the heart at every stride.

But here I must pause, to own that, if on the one hand the danger and discomforts of the cure are greatly exaggerated, (exaggerated is too weak a word,) so on the other hand, as far as my own experience, which is, perhaps, not inconsiderable, extends, the enthusiastic advocates of the system have greatly misrepresented the duration of the curative process. I have read and heard of chronic diseases of long standing cured permanently in a very few weeks. I candidly confess that I have seen none such. I have, it is true, witnessed many diseases perfectly cured—diseases which had been pronounced incurable by the first physicians, but the cure has been long and fluctuating. Persons so afflicted, who try this system, must arm themselves with patience. The first effects of the system are, indeed, usually bracing, and inspire such feelings of general well-being, that some think they have only to return home, and carry out the cure partially, to recover. A great mistake—the alternative effects begin long after the bracing—a disturbance in the constitution takes place, prolonged more or less, and not till that ceases does the cure really begin. Not that the peculiar “crisis” sought for so vehemently by the German water-doctors, and usually under their hands manifested by boils and eruptions, is at all a necessary part of the cure; it is, indeed, as far as I have seen, a rare occurrence. But a critical action, not single, not confined to one period, or one series of phenomena, is at work, often undetected by the patient himself, during a considerable (and that the latter) portion of the cure in most patients where the malady has been grave and where the recovery becomes permanent. During this time, the patient should be under the eye of his water-doctor.

PHRENOLOGICAL DEVELOPMENTS OF DR. SAMUEL THOMSON,

AUTHOR OF THE THOMSONIAN SYSTEM OF MEDICAL PRACTICE.

The Phrenological Almanac for '45, published by O. S. & L. N. Fowler, 131 Nassau Street, New York, says, "It is due to science that it should give some account of the phrenological developments of so conspicuous a public man as Dr. Samuel Thomson. Now that he is dead—now that those party asperities are partly subsided, which existed when he lived, it is desirable to put on permanent record the true phrenological character of this renowned man. And the more so, because these developments will not budge one hair's breadth to the favorable estimation of friends, or the violent hostilities of enemies.

His *character* I shall not attempt to give, but simply his *organization*. What he was, and what not, is left for others to say. The *developments alone* concern us,

His head was about the average in point of size: I think 21 3-4 inches in circumference. It might have been larger or smaller by a quarter of an inch. In person he was rather large, at least of full size, full chested, and rather stout built; weighing about 150 pounds. His Organization indicated great compactness, density and vigor, as well as capacity to endure and accomplish. His hair was rather thin, and his Organization not as fine as it was powerful. Hence, while he would secure friends and make impressions, he would yet sometimes offend a refined taste. His three largest organs were Firmness, Approbativeness, and Causality. To say that he was obstinate, even to mulishness, is strictly correct. This organ was supported by large Combativeness. His organs say that he courted opposition. His anger, owing to the same cause, was powerful and quick, and his hatred cordial and powerful. He had all the organs that contributed to give force of character. Difficulties only stimulated him. Nothing daunted him. He looked upon nothing as too great to be accomplished. This was a remarkable element of his character, judging from his head. Severity was also indicated.

All the social organs were large; Amativeness particularly so. This, combined with the last point, would render him beloved or hated in the *extreme*; because his likes and dislikes partook of the same character—a two-edged sword, that cut one way or the other. Appetite was strong. So were the organs of making money. Secretiveness, according to the best of my recollection, was small; so much so, as to render him blunt;

and Ideality being deficient; rather uncouth, not qualified, and too sweeping and positive. Cautiousness was not extreme. Self-esteem was small. This would seem to conflict with the general impression entertained of his character in this respect. I recollect that it was small, and that I was surprised at finding it so. But his Approbativeness was enormous. This, next to Firmness, was his ruling faculty. On this point, he was weak, (I speak of the organs, and not of his actual character, when I say what he was and what he was not). He was very vain, and pushed himself and his system beyond account.

I do not remember certainly about the size of Conscientiousness, but my impression is pretty distinct that he had it large. If so, it worked with Approbativeness, to give him regard for his MORAL character, and with Combativeness, to make him defend the right. At all events, he had no deception; loved and spoke the truth, and was not naturally cunning or double-faced.

Veneration and Marvellousness were both small—too small to exert any perceptible influence in his character. He was sceptical and radical, and had no regard for the old or sacred. Nor was he particularly religious. Any thing else sooner.

Benevolence stood out conspicuously, indicating that he had the good of his fellow men at heart. He would make men happier and better. Mechanical ingenuity was good. Imitation was small, but Causality, as seen in the cut, was large. Hence, he would strike out a new track of his own—would follow no pattern; would exhibit an originally inventive genius.

The general cast, tone, and tenor of his genius, was that of a plain, practical, common-sense man. He saw things in a correct light. He exhibited great judgment, and power of creating, as well as of adapting ways and means to ends. Still, his talents were of the sound, deep, reasoning cast, rather than of the showy or glaring. He resembled a fire made of hard wood, or of coal, not of shavings or pine wood. His discriminating faculties were also great: his power of analysis, discernment, generalization, &c., were great, and constituted a leading element of his talents.

He had a very uneven head, which indicated an uneven, strongly marked, peculiar, striking, original, eccentric character, and one that would make some noise in the world. He could not live in a corner, or die unknown.

A head thus organized, would be given to excesses in some quarters, and deficiencies in others. Many of the former would result from mere impulses that did not enter into the constituent elements of his

character. More blame, therefore, would be laid on him than really belonged to him, and less allowances made than were proper and due. He could not labor in vain, but would effect some great work, in whatever direction he expended his powers. He would be likely to live to a good age, for his constitution was powerful, and liable to go through what would kill most men. Extraordinary vigor and elasticity are imparted by this temperament, and more of the powerful than of the attractive, or the smooth and pretty."

O. S. FOWLER.

MORAL INSANITY.

No other variety of mental disorder is calculated to occasion so much difficulty to commissioners or other visitors of lunatic asylums, or to give rise to so much perplexity in courts of justice, as that unsoundness which is termed, "*Moral Insanity*." It is defined to be an affection in which the sentiments, habits, and, generally speaking, the moral feelings, rather than the intellectual faculties, are in a preternatural and disordered state. The common distinctive character of all these cases is of a negative kind; viz.: that the faculties of the understanding remain apparently unimpaired, and that no delusive impression can be detected in the mind of the patient which may account for the perversion of his moral dispositions. Cases of this description were formerly looked upon as unaccountable phenomena. They are, however, now recognized as a distinct form of mental disorder in nearly all the public asylums. They are characterized by a total want of self-control, with an inordinate propensity to excesses of various kinds—among others, to intoxication. This is often followed by an attack of mania, which, however, speedily subsides when the patient is confined; but is generally reproduced by the same exciting cause soon after he is discharged.

Many of the inmates who are apparently convalescent, whose conversation betrays no trace of intellectual aberration, and who present themselves to the commissioners as having a right to their release, are still so far disordered in their moral dispositions and habits, that nothing but the control implied in their detention within a lunatic asylum, keeps them from displaying their disease. Some of these persons are still extremely dangerous, and the discrimination of their state is one of the greatest difficulties connected with the management of the insane. The following instance is recorded in the report:—An epileptic lunatic,

sufficiently recovered to be allowed to work on the farm of the proprietor, escaped from Gateshead Fell. He was pursued, but the wife of the patient interceded, and, as he was apparently rational, he was allowed to stay at large. Only two nights after his escape, he murdered his wife and daughter in a most horrid manner!

A case, recorded in the report of an American Asylum, is not less striking:—A black man, a lunatic, who was confined in an asylum, had followed the trade of a butcher. He had been confined many years, but from his showing no violence, was considered harmless, and allowed the range of the asylum. One night the black butcher secreted a knife: he induced another patient to enter his cell, prevailed upon him to lie down, and then cut his throat; he afterwards calmly cut him in quarters, and distributed the joints around his cell, as he had been in the habit of arranging meat in his shop. He solicited the custom of his comrades, and to those who were chained, he carried such portions as they desired. The keeper was disturbed by their cannibal rejoicing. On examining the cells, he found one man missing. He asked the black butcher if he had seen him, and the latter replied that he had just sold the last joint! This is an extreme case, but instances are known in every large asylum, displaying a total perversion of all moral feelings and social affections, while the sense and intellect survive, nay, are even lively and acute—a fact which ought to convince us that illusions and other passable defects of the understanding are not the most essential and necessary concomitants of insanity.—*Lon. Med. Gaz.*

LECTURES ON NEUROLOGY.

[We learn, through the agency of the Botanico-Medical Recorder, that Dr. Buchanan is now in Cincinnati, lecturing upon his favorite science, Neurology, and we are highly gratified to learn that the Dr. is eliciting profound attention, from the talented citizens of Cincinnati, to his able and instructive lectures. We take a pleasure in presenting our readers with a synopsis of those lectures, which we copy from the Recorder, edited by Prof. Curtis, of Cincinnati.]

DR. BUCHANAN'S LECTURE, on Monday evening, was strictly preliminary or introductory. He remarked that he felt proud to appear again before the citizens of Cincinnati, since his predictions had been fulfilled as to the progress of Neurology. Five years ago, not a man in

the civilized world believed in the possibility of exciting the brain, and thus making physiological discoveries. When he announced his discovery in 1841, it was received with universal incredulity, ridicule, and opposition; but already the discovery had spread through America and Europe, had been demonstrated in every city, and had disarmed the violent prejudices which it at first encountered. It had been carried before the public in conjunction with animal magnetism; and, although the experiments had been made in an unphilosophical manner, and, generally, by incompetent persons, they had proved convincing to the liberal minded, and aroused a spirit of inquiry. He repudiated all connection with the Mesmeric exhibitors, whom he considered ignorant of the principles of Neurology, but referred to Prof. Caldwell, Prof. Curtis, Rev. Mr. Stuart, and several other scientific gentlemen, as well informed in reference to his principles, and capable of presenting them properly before the public.

He defined NEUROLOGY as the science of the whole nervous matter of the body, and especially of its paramount organ, the brain. This nervous matter being the seat of life and mind, Neurology must be, in fact, the whole science of man—a complete system of Anthropology.

He demonstrated forcibly, that the brain is the organ of the mind, and the seat of all our physiological as well as mental powers—that all mentality and all physiology concentrate in this master organ, and that the only mode of rendering physiology or medicine an exact science, was to discover the functions of the brain. This had not been done by the professors of medical science—it had been attempted by Dr. Gall and his followers, but they had not completed the undertaking, and could not make a science of exactness or certainty by means of Craniology. A new method of exploring the brain must be discovered, or we must forever rest in Egyptian darkness in reference to the most important knowledge in the whole circle of sciences.

Neurology offers the key to this knowledge by showing the impressibility of the brain. The sole question is, Can the brain be excited or not? If it can, we can build up a magnificent science by such experiments—if it cannot, all is delusion; and we cannot trust our senses.

He proposed to prove that the hand could affect the brain, by experimenting upon any number of the audience, who might come forward. Some eighty or a hundred persons then advanced to the platform, and he began to test their impressibility by applying his hand to their heads upon the frontal organs. He remarked that all those who came forward were entire strangers to him, but that from their appearance he believed that a

number would be found impressive. About thirty or forty were tested publicly, and about four-fifths of the whole number experienced sensible effects when he applied his hand to the head. The effects were similar in all—weakness, trembling of the knees, swimming of the head, unsteadiness of position, accelerated action of the heart, and an attraction to follow the hand of the operator, were the principal results produced. Several were drawn forward by his attraction, in spite of their utmost resistance.

The second lecture of Dr. Buchanan was attended by a large and intelligent audience, and was devoted to a consideration of the different views of the human constitution which have been taken by mental philosophers, phrenologists, physiologists, and the cultivators of animal magnetism. These doctrines he compared with the science of Neurology, showing that they are defective in certain essential facts, which facts are supplied by Neurology alone. Metaphysical philosophy he considered a mere analysis of our powers, reducing all our faculties to certain simple elements. The more perfect the analysis, the less we know when it is completed. A metaphysician, instead of recognizing the variety of powers admitted by phrenologists, recognizes only a few primitive faculties from which he forms all others. The more perfect his analysis, the fewer faculties he recognizes. One philosopher may recognize ten faculties, another will analyze the ten and reduce them to two or three. One may recognize memory, comparison, and reason; another may prove by analysis that those three powers are only various forms of the power of association. In short, our practical knowledge of man all evaporates in the alembic of metaphysics, which reduces our faculties to the smallest possible number, and, when the analysis is perfected, carries us back to the starting point, that we have one power which cannot be analyzed any further; which power is *the mind*.

Phrenologists, avoiding this destructive analysis, look at human nature as it is, instead of looking for a theoretical substratum. They are in advance of the Metaphysicians, as the Chemists are in advance of the Alchemists. They recognize certain faculties and passions as essentially distinct, and, like the simple bodies of chemistry, not to be confounded; and not composed of the same ultimate elements. They seek to locate these faculties and passions in the brain, and, in the general results, they are sustained by the common sense of mankind. But it is impossible to form an accurate science by Craniology, on account of the irregular and uncertain thickness of the skull. Nor does the prevalent system of Phrenology pretend to develop all the functions of the brain. The basilar region of the brain is beyond its observation, and the physiological

functions of the brain are entirely overlooked. Phrenology explains only its mental, not its physiological, powers. It is, therefore, a very partial view of the human constitution.

Physiology and Anatomy explain our bodily constitution and functions, but without explaining the source or moving power of all these functions. While they refer every thing to the brain and nerves as the source or seat of every function, they tell us nothing of the powers of the brain itself, which is the master of all. They deal in facts or effects without causes—they are too mechanical—they are not philosophical.

Mesmerism explains nothing—it contributes a stock of wonderful facts without any explanation; and thus sheds a flashing meteoric light over the constitution of man, but leaves us enveloped in night and mystery.

Neither of these is a system of Anthropology, nor do all of them put together make a complete science of man. They are unconnected—they are partial surveys of the human constitution. Metaphysics offers us a mental alchemy.—Phrenology a comparison of the mind and the brain.—Physiology a survey of the body.—Mesmerism a collection of wonders. These fragments of the true Anthropology, uncombined as they are, resemble the planets of the solar system, void of a sun, wandering in separate orbits, and often in collision with each other. The brain is the sun, the centre of the true system of Anthropology. Physiology is but its downward influence, its manifestation in the body.—Phrenology presents its upward influence, its manifestations in mind—which are still farther elucidated by metaphysical inquiry and mesmeric experiments.—Neurology, taking the brain as its centre, and tracing therefrom the subordinate sciences of its effects, unites them in one harmonious system—a full and perfect Anthropology—tracing the relations of man upward to his Creator—around to his fellow-beings—and downward to inorganic matter—giving to the whole the exactness and certainty of a vigorous demonstration by experiment.

Several gentlemen then came forward, and, upon being tested, gave decided indications of impressibility. Dr. B. then requested one of them to try the strength of his arms in lifting, and he sustained two chairs at arms length, with several pounds weight upon them. Dr. B. then applied his hand upon the head in front of the ears, so as to excite the organs producing muscular debility, and in a short time the strength of the young gentleman was so diminished that he could not lift the chairs alone by the utmost exertion that he could make. He then placed his hand before the upper posterior part of the head, and removed the former influence so as to obviate the painful sensations produced by the

experiment in the muscles of the arm. Two other gentlemen, intelligent, middle aged, and rather robust, were then tried in the same manner, with still more striking effect; one of them seemed almost paralyzed by the debilitating operation, but was speedily enabled, by exciting some of the upper occipital organs, to make a free display of his strength. These demonstrations were considered very striking and satisfactory.

HOMŒOPATHY.

The term Homœopathy is derived from two Greek words, meaning *similar affection*, and is indicative of the leading principle of the science. To illustrate this principle, which is expressed more fully in Latin by the words, "*similia similibus curantur*," let me bring an instance familiar to every one. Our board of health are now obeying this great law, by directing vaccination to be performed. While they condemn homœopathy openly, they are actually practising it by introducing into the systems of our citizens a *similar affection* to the small-pox to cure small-pox, or prevent it. This is nothing but homœopathic treatment. Nine-pox, like every other true homœopathic remedy, is prophylactic of small-pox, only because it is such a *similar affection* as renders it a *specific cure* for it. Small-pox, when introduced into the cow, is altered by going through this animal, so that when re-introduced into man, it is no longer identical with small-pox, but *similar*, though only slightly different. This *slight change* which the virus undergoes in the cow, brings it beautifully within the great homœopathic law, "*similia similibus curantur*," and renders it such a great preservative of our race from the ravages of the small-pox. This is a single instance of that same homœopathy which every one feels privileged to sneer at, while, perhaps, he is indebted for his *own life* to the operation of this very principle. Homœopathy has discovered similar cures and prophylactics for scarlet fever, measles, Asiatic cholera, and epidemic typhus, that the vaccine virus is for small-pox, and has the same *perfect control* over these diseases. The medical profession, while they are willing to appropriate these great discoveries to their own use, are yet trampling on homœopathy with the same vindictive and stormy hatred that the Jews manifested in endeavoring to exterminate Christianity, because it dared to question and condemn their doctrines and practices. This method of meeting great scientific discoveries, savors more of the reception Galileo and his doctrines met with, a "long time ago," than it does of the civilization and intelligence of the nineteenth century.

C. H. H.

PHRENOLOGY.

The phrenologist most earnestly appeals to parents, and instructors of every class, kind, and degree, and strenuously urges the necessity of withholding from the child whose spiritual birthright they acknowledge, all that can misengage the attention of the spirit in the human or inferior region of the soul, in order that it may, in its fullest or purest power, develope and organize the highest disposition, and, through the purest sentiments, complete its work of producing a more and more refined and perfect organization.

The phrenologist declares, that the creating Spirit distinguishes the good from the evil, the darkness from the light, producing all the delightful sensations it has adapted it to sense.

The phrenologist terms the brain, the fiery region of the spirit, and from its facts or development, infers spiritual facts which only the creating Spirit can originate, continue, and sustain.

The phrenologist declares the child to be like a seed, in which are enfolded all the qualities, properties, and talents, the Spirit will unfold and manifest when the educator carefully and continuously removes all obstructing influences, and furnishes the suitable conditions for the same.

The phrenologist asserts, most distinctly, that to treat the child as an empty sack, and to strive only to fill it with technical facts, is a wrong to the divinity within it, and must inevitably be attended with the most fatal, degenerating, and disastrous consequences.

The admiration or delight which we experience when we contemplate fair and beautiful objects, the phrenologist hesitates not to declare, must be referred, not to the objects themselves, but to the spirit in us with which the spirit in them corresponds.

The phrenologist requires of all engaged in education, to recognize and address the spirit in the child—to acknowledge that the senses are **OUTLETS** for the spirit, whereby it exercises itself upon outward objects; and not **INLETS**, through which to take spiritual impressions or sensations.

The phrenologist most earnestly pleads for a liberal encouragement of all social arrangements that incite and occasion the spirit to take up its abode in the purest sentiments and noblest talents, so that it may exercise the highest region of the brain, and through it manifest itself outwardly.

He also calls loudly upon those who legislate for the public welfare of the people of this great nation, to remove, as far as possible, all temptations that shall necessitate or stimulate the spirit to disproportionately exercise the inferior regions of the brain.

The phrenologist shows clearly, that just as the EARTH makes its way through earthly organs into man, so will the HEAVENS make their way into man through heavenly organs. He clearly points out, that not follows organ, and organ the elements of which it is constituted.

EXTRAORDINARY EXPERIMENTS AND EXTRAORDINARY CURES.

In the *Courier des Etats Unis*, of a recent date, the editor, in an amusing article, purporting to give his last recollections of Paris, which he left on the first of last month, relates some experiments which he witnessed in the public slaughter-houses of Paris (*abattoirs*) of a very remarkable character.

The first experiment was in order to resolve the much mooted question, whether perception is extinguished by decapitation? Accordingly, several sheep and calves being brought out, the head of each was struck off at a single blow; a lighted candle was then held before the eyes, which—horrible to relate—contracted, and were agitated two minutes after the decapitation. It is horrible to think, as a possible thing, that a human being guillotined may think and feel two minutes after the head is separated from the body—minutes that would be ages of unspeakable agonies. It is, indeed, probable that the sensation which thus survives is purely animal, and that intelligence and consciousness are annihilated by the blow that separates the head; but it is horrible that there should be room even for a doubt on this point, and that it should seriously be a matter of question among some of the learned.

It seems, moreover, that the possibility of such a thing was foreseen by Guillotin, the learned philanthropist, whom science and humanity have so unworthily rewarded, in giving his name to the instrument he invented. M. Bizet possesses a model designed by Guillotin himself, in which, above the fatal circle into which is thrust the neck of the victim, is a heavy hammer, which in its descent strikes the head at the same moment it is separated by the axe from the body, and thus stuns it into unconsciousness. The machine has been used in France without this accessory of provident humanity, because, perhaps, the revolutionary tribunal deemed it too complicated for their expeditious operations. Now this precaution ought to be adopted.

The second experiment I witnessed was to establish the marvellous effect of the Boochieri water. This water, called after the Neapolitan chymist who invented it, and who retains the secret of its preparation,

has caused a sort of revolution in medicine and surgery. Every one knows the comparative inability of surgery to arrest sudden hemorrhages, especially of the arteries—injuries which are so rapid in their consequences, that the patient is often dying before the usual remedies can be applied. Mr. Bocchieri has obviated this difficulty. In the experiment which I witnessed, two operators divided the carotid artery of two sheep. The one was immediately put into the hands of surgeons, to be treated according to the best methods known to science; the other was treated with the Bocchieri water. The animal treated *secundum artem*, or scientifically, died of the hemorrhage; the other, dressed with this marvellous water, was running about and eating twenty minutes afterwards! This caused the famous Lisfranc to exclaim, "Gentlemen, here is a result which may be summed up in two words—here is death, and there is life."

When the lint, which had been steeped in this water, was removed, the wound was found perfectly dry and free from any tinge of blood. The doctors, struck with this, caused the animal to be killed, and, on dissecting to the artery, it was found that there was no scar, but an actual reproduction of the vessel; thus seeming to prove that, by its action on the fibrine of the blood, it produced a new organization of the tissue. M. Bizet has ascertained, that in the different slaughter-houses of Paris, in the course of one year, 1,145 cases of severe cuts sustained by the butcher boys had been cured by this water, in an average of twenty minutes each.

Other extraordinary cures have been effected by it, especially in checking spitting of blood, which is now under the control of the physicians; and external wounds may be cured by it almost with the watch in hand. M. Gallardet adds, that the experiments he witnessed were made at the instigation of the Commander of the Cavalry in Paris, (with a view to the introduction of this remedy into the military hospitals; and

SURGICAL OPERATION UNDER MAGNETIC INFLUENCE.

ANIMAL MAGNETISM.—A few days since, a large tumor was taken from the shoulder of Mrs. Dunn, wife of the Principal of the Academy at Hempstead, L. I., without pain, she having been put in a mesmeric sleep. After the operation was finished, "Mr. Dunn, by a few reverse passes, restored her to consciousness. In reply to an observation that she had had quite a nap, she said she had, and that she felt better for it. The tumor having been mentioned, she was told that the physicians had

examined it, and had concluded to do nothing more with it at present. She expressed considerable disappointment, and being asked if she would consent to be mesmerized next week, and have it taken out, she answered in the negative, and said that if it became necessary to have it removed, she would prefer to remain in a state of consciousness. Dr. French asked if she had experienced any pain or uncomfortable sensation during the sleep.—She said she had not, and the Dr. then asked what she would think if he should tell her that it had been removed. She turned her eyes towards her shoulder, and perceiving a small spot of blood lower down on her dress, with a countenance indicating much anxiety, she asked her husband if it was out. The tumor was shown to her, and she evinced considerable agitation.” The parties to this transaction, says the *Brooklyn Eagle*, are all well known in Hempstead, and their standing and position are such as to preclude all idea of deception.

N. Y. Jour. of Commerce,

[FOR THE ST. LOUIS MARKET.]

THE BEAUTIES OF NATURE.

Will you come with me to the foaming sea,
While the wind her bosom is swelling,
And the mournful song is wafted along
To the door of our peaceful dwelling.

Now the troubled sky bodes the rain-cloud nigh,
And its black, dark shade is descending,—
And the lightning's flash, and thunder's crash,
With awe each knee is bending.

But with glory three-fold; in crimson and gold,
Is the arch of Hope suspended
Against the storm-cloud; that's but a thin shroud
'Twixt us and where each ray is blended;

Where each tint and tone mingle into one,
And the light of day is shining,
Both clear and bright, in perfect light,
Peace, love, and hope, combining.

And now to the fields, where Nature yields
Rich blessings to him who seeks them,
Where the new-mown hay, and flowers gay,
With their sweet fragrance greet them.

And the garden wiles us with her smiles,—

The rose and mignonette,

And the blooming bean, and lavender green,

With sparkling dews are wet;

And the odorous scent, from each gay plant,

On the viewless air is stealing,

And is wafted along, by the zephyr's low song,

To our senses new pleasures revealing.

How sings the breeze, in the forest trees,

As they wave in ceaseless motion,

As it dashes along o'er the sturdy throng,

On its way to the restless ocean?

The bare mountain stones give out their tones

From each cave, and glen, and hollow,

And dizzy height, where the eagles' flight

Is beyond the eye to follow.

And Nature's harp sings, on innumerable strings,

The heart's best sympathies moving,

In tones of delight, in darkness and light,

Ever fair, ever new, and improving.

Her charming voice speaks, to him who seeks,

A language that's deep and unshaken,

Of beauty and truth, to the aged and youth,

And sweetest emotions awaken.

Thus the lovely earth is giving birth,

Each moment, to new scenes of enjoyment,

And every sense has its recompense

In the pleasure of every employment.

And the mind expands — as the numberless sands

That on ocean's shore are driven,

Are the thoughts that raise the spirit's gaze

From the pleasures of earth to Heaven.

St. Louis, Jan. 20, 1846.

G. W. W.